

CLAIMS

1 1. (previously presented) A method for use in wireless equipment, the method comprising
2 the steps of:

3 receiving user channel transmit power information from base stations involved in a soft handoff
4 with user equipment; and

5 receiving information from the user equipment, the information received from the user
6 equipment comprising a value representative of an excess signal-to-noise ratio determined by the user
7 equipment as the amount by which a signal-to-noise ratio value of one or more user channel signals
8 received at the user equipment exceeds a target signal-to-noise ratio value;

9 wherein the wireless equipment determines a reference user transmit power level for use by the
10 base stations as a function of the received user channel transmit power information and the received
11 information from the user equipment.

1 2. (canceled)

1 3. (previously presented) The method of claim 1 wherein the information received from the
2 user equipment comprises a value representative of the excess signal-to-noise ratio of a user channel
3 signal received from one of the base stations that is stronger than the user channel signal received from
4 another of the base stations.

1 4. (previously presented) A method for use in wireless equipment, the method comprising
2 the steps of:

3 receiving user channel transmit power information from base stations involved in a soft handoff
4 with user equipment; and

5 receiving information from the user equipment, wherein the information comprises an identifier
6 of a base station with a received signal at the user equipment that is stronger than the received signal of
7 other base stations and a signal-to-noise ratio value of the signal received from the identified base station;

8 determining a downlink reference power from the received user channel transmit power
9 information and the received information from the user equipment; and

10 transmitting the determined downlink reference power to the base stations.

1 5. (previously presented) A method of claim 4 wherein the signal-to-noise ratio value
2 represents an excess signal to noise ratio value determined as the amount by which the signal-to-noise
3 ratio value of the signal received from the identified base station exceeds a target signal-to-noise ratio
4 value.

1 6. (previously presented) A method for use in wireless equipment during a soft handoff of
2 user equipment with a number of base stations, the method comprising the steps of:

3 identifying, at the user equipment, a base station with a received signal at the user equipment that
4 is stronger than the received signal of one or more other base stations; and

5 calculating, at the user equipment, a signal-to-noise ratio value of the signal received from the
6 identified base station; and

7 transmitting the identity of the identified base station and the calculated signal-to-noise ratio
8 value from the user equipment to a control point of a wireless system.

1 7. (original) The method of claim 6 wherein the control point is a common control point.

1 8. (previously presented) The method of claim 6 wherein the calculated signal-to-noise
2 ratio value represents an excess signal to noise ratio value determined as the amount by which the

3 signal-to-noise ratio value of the signal received from the identified base station exceeds a target
4 signal-to-noise ratio value.

1 9. (previously presented) Apparatus for use in wireless equipment, the apparatus
2 comprising:

3 a receiver for receiving user channel transmit power information from base stations involved in a
4 soft handoff with user equipment, and receiving information from the user equipment; and

5 a processor for determining a reference user transmit power level for use by the base stations as a
6 function of the received user channel transmit power information and the received information from the
7 user equipment, wherein the information received from the user equipment comprises an excess
8 signal-to-noise ratio value determined as the amount by which a signal-to-noise ratio value of one or
9 more user channel signals received at the user equipment exceeds a target signal-to-noise ratio value.

1 10. (canceled)

1 11. (previously presented) The apparatus of claim 9 wherein the information received from
2 the user equipment comprises a value representative of the excess signal-to-noise ratio of a user channel
3 signal received from one of the base stations that is stronger than the user channel signal received from
4 another of the base stations.

1 12. (previously presented) Apparatus for use in wireless equipment, the apparatus
2 comprising:

3 a transceiver for (a) receiving user channel transmit power information from base stations
4 involved in a soft handoff with user equipment, (b) receiving information from the user equipment,
5 wherein the information comprises an identifier of a base station with a received signal at the user
6 equipment that is stronger than the received signal of one or more other base stations and a
7 signal-to-noise ratio value determined by the user equipment for the user channel signal received from
8 the identified base station, and (c) transmitting a downlink reference power to the base stations; and

9 a processor for use in determining the downlink reference power from the received user channel
10 transmit power information and the received information from the user equipment.

1 13. (previously presented) The apparatus of claim 12 wherein the signal-to-noise ratio value
2 represents an excess signal to noise ratio value determined as the amount by which a signal-to-noise ratio
3 value measured by the user equipment for the user channel signal received from the identified base
4 station exceeds a target signal-to-noise ratio value.

1 14. (previously presented) Apparatus for use in wireless equipment during a soft handoff
2 with a number of base stations, the apparatus comprising user equipment having:

3 a processor for use in (a) identifying a base station with a received signal at the user equipment
4 stronger than the received signal of one or more other base stations, and (b) calculating a signal-to-noise
5 ratio value for the user channel signal received from the identified base station; and

6 a transmitter for transmitting the identity of the identified base station and the calculated
7 signal-to-noise ratio value to a control point of a wireless system.

1 15. (original) The apparatus of claim 14 wherein the control point is a common control
2 point.

1 16. (previously presented) The apparatus of claim 14 wherein the calculated signal-to-noise
2 ratio value represents an excess signal to noise ratio value determined as the amount by which a

3 signal-to-noise ratio value associated with the received signal from the identified base station exceeds a
4 target signal-to-noise ratio value.

1 17. (previously presented) A transmission frame representing data embodied in a wireless
2 transmission signal, the transmission frame comprising:
3 a first portion of a field comprising at least one bit for conveying data representative of an
4 identifier for identifying a base station whose received signal at a user equipment is stronger than signals
5 received at the user equipment from one or more other base stations; and
6 a second portion of the field comprising at least one bit for conveying data representative of a
7 signal-to-noise ratio value of the received signal from the identified base station at the user equipment.

1 18. (original) The transmission frame of claim 17 wherein the transmission frame is
2 conveyed via a radio resource control based protocol.

1 19. (original) The transmission frame of claim 17 wherein the transmission frame is
2 conveyed via physical layer signaling.

1 20. (previously presented) The method of claim 3, wherein the received information from
2 the user equipment comprises a value representative of the excess signal-to-noise ratio for the strongest
3 received user channel transmit power signal.

1 21. (new) The method of claim 1, wherein:
2 the base stations use the reference user transmit power level during a fast power control loop;
3 the user equipment determines the reference user transmit power level in a slow control loop; and
4 the fast power control loop is implemented multiple times for each implementation of the slow
5 control loop.

1 22. (new) The method of claim 4, wherein:
2 the base stations use the determined downlink reference power during a fast power control loop;
3 the user equipment determines the determined downlink reference power in a slow control loop;
4 and
5 the fast power control loop is implemented multiple times for each implementation of the slow
6 control loop.